

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 80

In the matter of

PORTLAND GENERAL ELECTRIC
COMPANY,

2023 Integrated Resource Plan and Clean
Energy Plan.

PHASE 2 COMMENTS OF NEWSUN
ENERGY LLC

I. INTRODUCTION

Pursuant to the Ruling issued July 14, 2023, NewSun Energy LLC (“NewSun”) hereby submits these Phase 2 Comments on Portland General Electric Company’s (“PGE’s”) 2023 Integrated Resource Plan (“IRP”) and Clean Energy Plan (“CEP”). According to its current draft IRP and CEP, PGE’s primary plan for compliance with Oregon House Bill 2021 (“HB 2021”) appears to be continuing to run its thermal resources in Oregon at full tilt, under-investing in community-based renewable energy (“CBRE”), while pointing to massive investments in out-of-state renewables that are “connected” to its Oregon retail consumers only by phantom transmission capacity. In UM 2273, PGE has expressly rejected calls to retire renewable energy credits associated with its out of state renewables for the benefit of its Oregon ratepayers.¹ PGE’s plan fails to explain in any way how its proposed investment in disconnected, out-of-state renewables would provide additional direct benefits to communities in Oregon “to the maximum

¹ See Portland General Electric Company and PacifiCorp d|b|a Pacific Power Joint Phase I Response Brief, August 21, 2023; p.3 (“There is no basis to interpret ORS 469A.400 through 469A.475 to require reporting, accounting, or retiring of RECs to comply with HB 2021.”)

extent practicable.” While PGE’s plan may envisage emissions reductions in a distant or corporate-wide sense, it does very little to show actual, continual progress toward reducing emissions specifically “associated with the electricity sold to retail electricity consumers.”

Because PGE IRP/CEP does not present a viable path to meeting its emissions reduction targets, the IRP/CEP does not meet the applicable legal standards for approval following HB 2021. The Commission should condition any future acknowledgement of this IRP/CEP on each of the following:

- A. Direct PGE to revise CEP to reflect more economic and technically feasible transmission options.
- B. Require detailed analysis and associated timelines of transmission upgrades in future IRPs.
- C. Direct PGE to model uncapped CBREs, or up to 125% of CBRE potential.
- D. Direct PGE to model distributed generation at the highest achievable potential.
- E. Require that PGE curtail thermal unit use overall for the benefit of Oregon communities and to match marketed GHG reduction goals of zero emissions company-wide by 2040.
- F. Direct PGE to comply with Commission rules in providing draft avoided cost information in the same format as will be provided in final form following IRP acknowledgement.
- G. Direct PGE to provide a detailed and comparative analysis of how its IRP/CEP would, to the maximum extent practicable, generate renewable energy in a manner that provides additional direct benefits to communities in Oregon.

The point at which to act and redirect assumptions to meet HB 2021 timelines is now. Public Utility Commission Staff, Oregon legislators, and many stakeholders have expressed concerns about PGE’s ability to meet HB 2021 timelines. PGE must assure staff and stakeholders that this IRP will ensure achievement of looming HB 2021 emissions reductions goals.

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II. LEGAL STANDARDS FOR IRP/CEP APPROVAL

As currently drafted, PGE’s IRP/CEP fails to satisfy the legal standards for acknowledgement by the Commission.² The Commission has partially waived IRP Guideline 1(c) to reflect that the primary goal of this IRP should not be limited to selecting the “least cost, least risk” portfolio. The passage of HB 2021 forces PGE to account for “the pace of greenhouse gas emissions reductions, and community impacts and benefits.”³ Under HB 2021, the Commission may acknowledge the CEP only if it is in the “public interest and consistent with the clean energy targets set forth in ORS 469A.410.”⁴

PGE’s plan is not in the “public interest.” In evaluating whether the plan is in the public interest, the Commission shall consider:

- (a) Any reduction of greenhouse gas emissions that is expected through the plan, and any related environmental or health benefits;
- (b) The economic and technical feasibility of the plan;
- (c) The effect of the plan on the reliability and resiliency of the electric system;
- (d) Availability of federal incentives;
- (e) Costs and risks to the customers; and
- (f) Any other relevant factors as determined by the commission.⁵

As discussed in further detail below, PGE’s plan includes numerous assumptions around the existence and availability of future transmission capacity that is neither economically nor technically feasible. PGE’s reliance on phantom interstate transmission, even if accurate, would degrade the overall reliability and resiliency of the electric system.

² *In re Pub. Util. Comm’n of Or Investigation into Integrated Resource Planning*, Docket No. UM 1056, Order No. 07-002 at Appendix A (Jan. 8, 2007) as corrected by Errata Order No. 07-047 (Feb. 9, 2007).

³ *In re Pub. Util. Comm’n of Or., Request to Waive IRP Guideline 1(c) for Pacific Power and Portland Gen. Elec. For the First Clean Energy Plans*, Docket No. UM 2225, Order No. 23-060, Appendix A at 5 (Feb. 23, 2023).

⁴ ORS 469A.420(2).

⁵ *Id.*

PGE’s proposed plan also does nothing to meet the express policy goals of the State of Oregon. HB 2021 provides that it is the policy of the State of Oregon for the retail electricity suppliers to rely on non-emitting power, that such electricity be generated in a manner that, to the maximum extent practicable, provides additional benefits in this state in the form of creating and sustaining meaningful living wage jobs, workforce equity, energy security and resiliency, and in a manner that minimizes burdens for environmental justice communities.⁶ There is nothing in the IRP/CEP that specifically analyzes how PGE’s plan would provide such additional direct benefits “to the maximum extent practicable.” On its face, it appears the lion’s share of such benefits would be realized outside of Oregon, while Oregonians would continue to breath emissions belched from PGE’s existing thermal fleet.

PGE’s plan is one of ultimate failure rather than incremental success. The Commission is charged with ensuring that electric companies demonstrate continual progress and are taking actions “as soon as practicable that facilitate rapid reduction of greenhouse gas emissions.”⁷ PGE should prioritize models and assumptions that surely meet the 2030 emissions target. By relying on phantom transmission in lieu of viable resources like CBREs and distributed generation (“DERs”), however, PGE’s plan is already on course to miss its 2030 emissions reduction targets. NewSun emphasizes that this IRP will prove to be a critical pivot point, and if PGE does not amend this IRP and CEP, including clarifying transmission assumptions and expanding modelling, PGE will fail to camply with HB 2021.

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⁶ ORS 469A.405.

⁷ ORS 469A.415(6).

III. COMMENTS

PGE’s emissions reduction plan is neither economically nor technically feasible. PGE must reduce emissions from its 8.1 million metric ton CO₂ equivalent (“MMTCO₂e”) to only 1.62 by 2030, 0.81 by 2035, and zero by 2040.⁸ To help meet this target, PGE proposes to conduct one or more requests for proposals (“RFPs”) for 66 MW of CBRE resources by 2026 and 155 MW of CBRE resources by 2030, 261 MWa of non-emitting resources each year through 2028 (1307 total MWa over 5 years) and forecasts a 944 MW summer, 827 MW winter 2028 capacity need.⁹ In total, PGE estimates it needs 3,000 to 4,000 MW in non-emitting resources and capacity to meet its 2030 target.¹⁰ The schedule for this docket calendars IRP acknowledgment for January 25, 2024, meaning that PGE’s next IRP will not be due until January 2026¹¹ leaving less than four years to acknowledge that IRP, issue one or more RFPs, negotiate, procure, and construct any additional resources to meet the 2030 target, and that’s assuming there are no delays or extensions.

The primary problem with the IRP/CEP is that PGE tries to wish into existence significant transmission upgrades, while failing to model other viable alternatives that present important avenues for achieving CEP goals. To reach zero emissions by 2040, the majority of emissions reductions must occur by 2030. That means that most of the reductions necessary to meet the 2030 target should be reflected in the action plan in this IRP. There is simply not enough time to procure substantial additional resources based on that next IRP/CEP action to have them online by 2030. The Commission must act now, in the IRP process, to resolve any

⁸ PGE Clean Energy Plan and Integrated Resource Plan 2023 at 90 (Errata filing Jun. 30, 2023) (hereinafter “PGE 2023 IRP”).

⁹ CEP & IRP Refresh Portfolio Analysis Refresh Addendum at 28 (Errata filing Jul. 7, 2023) (hereinafter “PGE 2023 IRP Addendum”).

¹⁰ *Id.* at 21.

¹¹ OAR 860-027-0400(3).

uncertainties to ensure that this 2023 IRP/CEP is robust, technically feasible, in the public interest and calculated to timely and fully reach that 2030 target. If it is already clear that PGE will fail to meet HB 2021 goals, the Commission should require PGE to change course to ensure compliance.

A. PGE has Failed to Address Challenges Associated with Transmission Builds and Upgrades.

PGE’s transmission assumptions and associated timelines are overly-ambitious estimates, at best. Transmission plans that are not timeline-feasible are not technically or economically feasible. Thus, the Commission should require that PGE revise and resubmit its CEP to reflect economic and technically feasible transmission options. Despite PGE’s contention that these resources are merely proxy representations,¹² the Desert Southwest Transmission proxy’s inclusion in the IRP comes at the exclusion of more reliable, technically and economically feasible resource options.

PGE modeled two generic proxy transmission options that include transmission to Wyoming or the Desert Southwest, unlocking an equivalent amount of Wyoming wind or Nevada solar.¹³ PGE made those proxy transmission and equivalent generation resources available for model selection as early as 2026.¹⁴ Initially, the model selected 44 MW worth of the Wyoming proxy in that first year (2026).¹⁵ PGE’s reply comments acknowledge that including these resources assumes that construction will begin as soon as possible, but that these additions are merely incremental. Even so, these transmission proxies still account for 400MW of Wyoming Proxy and 153 MW of Nevada proxy to come online in 2029- a significant number in

¹² Clean Energy Plan and Integrated Resource Plan 2023 Round 1 Comments: PGE response (hereinafter “PGE Round 1 Reply Comments”) at 18-19.

¹³ PGE 2023 IRP at 227-228.

¹⁴ *Id.* at 227.

¹⁵ *Id.* at 288.

the model.¹⁶ PGE notes that these transmission products “could be met through transmission rights, partnership in projects currently being developed, and/or additional development on a longer-term time horizon.”¹⁷

PGE’s reliance on hypothetical, future transmission presents significant timing concerns. PGE notes that the proxy resources are designed to “identify need for new transmission capacity that *could* become available” and that “[t]he years chosen for first availability of transmission proxies in portfolio modeling **do not necessarily represent an expectation of the time required to develop any specific transmission projects.**”¹⁸ This is concerning. It is virtually impossible that additional development of new transmission could be completed by 2026 when these proxies are made available to the model, or even by 2029 when they are selected. Based on extensive experience in developing renewable resources, any resources that rely on new transmission builds should assume a minimum of 10 to 15 years to be fully developed and brought online. Representatives from PGE and PacifiCorp acknowledged these timing concerns in a September 28th Senate Interim Committee on Energy and Environment- confirming that some transmission projects have taken up to 15 years to permit before construction can begin.¹⁹

The problem with PGE’s reliance on phantom transmission is that it eliminates other resources that are economically and technically feasible--which undermines the feasibility of the entire plan. In the same Energy and Environment Committee meeting, Legislators raised concerns along these lines about transmission timelines. Senator Sollman directed utility

¹⁶ PGE 2023 IRP Addendum at 25.

¹⁷ PGE 2023 IRP at 227.

¹⁸ PGE Response to NewSun DR 006 (Attached as Attachment A) (emphasis added).

¹⁹ Senate Interim Committee on Energy and Environment at 2:06:30, September 28, 2023 11:30 AM (Rick Vail, Vice President of Transmission at PacifiCorp described that NEPA permitting can take up to 15 years).

representatives to rethink transmission, and rather than adding more lines, to site generation closer to load:

You feed those “energy suckers” [or energy users] right there [with that generation] versus more and more transmission line ... so I just think you know we need to continue to have those conversations not necessarily about more transmission lines, but how are we putting those sources [generation and users] together.²⁰

In addition to the flawed timeline, PGE also has yet to explain how it derived the costs for those generic proxy resources and how those costs reflect general characteristics that may be found in the market. PGE points to a 2018 article in footnote 274 of the IRP as the source of its cost assumptions. That study, lists costs in Table 7 noting that:

The cost of electricity transmission can be substantially higher if substations are needed, and right-of-way costs have the potential to further markedly increase the cost of electricity transmission, with some recent transmission lines having full project costs that are as much as a factor of ten higher than the costs in Table 7.²¹

It is still unclear why PGE believes WY and NV proxies best represent general market characteristics.

B. PGE has not Maximized CBRE and DER Potential in Light of Transmission Challenges.

In light of transmission challenges, PGE should expand models for CBREs and DERs. PGE should model a portfolio with CBRE potential that is not constrained by the current CBRE cap. NewSun recommends the Commission direct PGE to model uncapped CBREs or at least up to some percentage threshold above what PGE determined to be achievable (125%). It would be far easier to raise the CBRE cap than it would be to build a new transmission line to Wyoming or Nevada.

²⁰ *Id.* at 2:16:00.

²¹ Relative costs of transporting electrical and chemical energy, Fadl H. Saadi, et al., *Energy and Environ. Sci.* 2018.

Such a portfolio would offer a useful tool against which to compare other portfolios cost and risks, especially ones that rely on non-existing transmission. PGE highlighted the high technical feasibility and cost benefit from community based renewable CBREs.²² Despite CBREs' numerous positive attributes, PGE has run models for up to 100% of CBRE achievable potential, or 155 MW, but not higher.²³ PGE explained that 155 MW "is the assessment of the resource potential and . . . the maximum amount that PGE considers realistic and informative."²⁴ PGE clarified that it determined what is realistic and informative by considering feedback from community participants, defined CBRE proxy resources to include in the portfolio, and quantitative assessments of leveraging multiple resources and lab studies.²⁵ NewSun appreciates PGE's transparency in its determination of 155MW, but fails to see how these factors necessarily preclude a model the projects more than 100% of CBRE potential.

PGE explained further that it modeled CRBE's technical achievable potential up to 100% like it modeled other portfolios such as pumped hydro and energy efficiency.²⁶ These other resources do not, however, enhance community benefits like CBREs. PGE should develop interim community benefits indicators ("CBIs") to inform CBRE analysis.²⁷ The CBIs should address the following topic areas:

- Resilience (system and community)
- Health and community well-being
- Environmental impacts
- Energy Equity (distributional and intergenerational equity), and

²² PGE 2023 IRP at 273.

²³ *Id.*

²⁴ PGE Reply Comments at 53.

²⁵ PGE response to NewSun Energy Data Request 005 (Attached as Attachment A) (emphasis added).

²⁶ *Id.*

²⁷ *In re Pub. Util. Comm'n of Or.; Near-term guidance on Roadmap Acknowledgement and Community Lens Analysis the First Clean Energy Plans* Docket No. UM 2225, Order No. 22-390, Appendix A at 30 (Oct. 25, 2022).

- Economic impacts²⁸

PGE did not account for all these topic areas in its CBRE modelling. There are likely a number of other project types that could provide these community benefits besides the three CBRE resources PGE reviewed. In addition, CBREs can alleviate transmission challenges—PGE acknowledges that CBREs are a net positive in “a transmission constrained system.”²⁹ Considering the uncertainty involved in transmission proxies, running a portfolio to include uncapped (or at least a higher percentage of) CBREs could present a more efficient path to achieve CEP targets, or at least be an informative tool to compare against the costs and risks of other portfolios.

Similarly, NewSun recommends that the Commission direct PGE to model a portfolio with DERs up to their fullest potential to mitigate the risk that PGE under-forecasted the pace of DER adoption. PGE explained that it determined technical potential for DERs using “customer adoption factors,” which include cost effectiveness as a consideration, but not the sole variable.³⁰ So PGE could not run a model unconstrained by cost.³¹ NewSun appreciates the clarification about methodology. Although the consumer factors may account for more than cost, PGE has not fully addressed the NewSun’s question. NewSun wants to ascertain costs and benefits of DERs at their fullest potential, regardless of consumer factors.

C. PGE Should Curtail Overall Use of Thermal Units for the Benefit of Local Communities.

The public interest is not served by PGE’s plan to continue operating fossil units located in this state for out-of-state sales. PGE operates five thermal units in Oregon— power generated

²⁸ *Id.*

²⁹ PGE 2023 IRP at 273.

³⁰ PGE Reply Comments at 54.

³¹ *Id.*

by these units is either provided to rate payers or sold out of state.³² Despite PGE’s projections that it will cease selling power from thermal units to rate payers by 2040, its projections show that it will continue using thermal units for sales out of state.³³ This continued thermal unit use is antithetical to PGE’s marketed emissions reduction goals. PGE has claimed both in its IRP and its marketing that it aims to achieve net zero emission, company wide by 2040.³⁴ Not only is this misleading to consumers who believe in PGE’s net zero goals, but also PGE’s plans to operate these thermal units to sell power out of state carries serious public interest implications.

Regardless of whether the power is used to serve load or is sold on wholesale basis, these thermal units have a local impact. These plants affect the Oregonians who live in neighboring communities, impacting their health and environment. PGE will celebrate “emissions reductions” at the expense of its ratepayers, while those same ratepayers will continue to live in the shadow of those same emissions. Further, continued thermal unit operation is fundamentally out of step with the spirit of HB 2021. Reliance on thermal units in and out of state also monopolizes valuable transmission—using these units less can free up transmission to deliver or balance variable and non-emitting resources as discussed above. Finally, instead of continuing to run fossil units for out of state sales, Oregonians should be the first to benefit. The capacity of these thermal units should be put on reserve for ratepayer use in case of a reliability or extreme weather event. This would increase resiliency and bolster the public interest.

³² PGE 2023 IRP at 14.

³³ CEP Data Template, Annual GHG Impacts of Actions Tab, *See* Market Sales (metric tons).

³⁴ PGE 2023 IRP at 10.

D. PGE Failed to Provide Draft Avoided Cost Information Required under OAR 860-029-0080(3).

The Commission should also condition any acknowledgement of this, and future IRPs on PGE's provision of the avoided cost information required under OAR 860-029-0080(3).

NewSun urged PGE to provide draft avoided cost information at the time it files its IRP, according to OAR 860-029-0080(3).³⁵ PGE claimed that it satisfied the requirement because:

“Table 6 details the different components of the avoided costs as used in Schedule 201 and where they can either be *found* or *developed* based on the information within the CEP/IRP.”³⁶

This is *not* the same thing as a draft of avoided costs.

Stakeholders should not be required to *find* or *develop* information necessary for the calculation of avoided costs. To ascertain avoided costs using this information would require extensive time and calculation on an individual's part. The Commission's rule vests that responsibility with the utility. “Each public utility must file with the Commission draft avoided-cost information at the time it files its integrated resource plan and file final avoided-cost information within 30 days of a Commission decision of acknowledgement of the integrated resource plan to be effective 30 days after filing.” The information required to be provided in draft form at the time of IRP filing should be identical in structure and format to that which is provided in final form within 30 days after the Commission's acknowledgement decision.

³⁵ NewSun Round 0 Comments at 14.

³⁶ PGE Reply Comments at 60 (emphasis added).

IV. CONCLUSION

Achieving the mandates set by HB 2021 hinges on the successful formulation of this IRP/CEP. PGE's proposed plan of investing in utility-scale resource located in Wyoming or Nevada is dependent upon wishful thinking about the development of new transmission capacity. Worse yet, PGE's proposed plan would come at the expense of additional investments in CBRE projects and DERs—which are not only economically and technically feasible but also bring additional direct benefits to local communities. The outcome of this venture is already clear. Years from now PGE will announce its “regret” that anticipated transmission improvements and additions have failed to materialize—by which time it will be too late to take corrective action needed to meet the 2030 emissions reduction target. For this and the other reasons set forth above, PGE's IRP/CEP fails to meet the applicable legal standards for approval. NewSun urges the Commission to make IRP acknowledgment contingent on PGE's implementation of the above clarifications and changes.

Dated this 21st day of November 2023.

Respectfully submitted,

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